



SpaceLogic KNX
4" Touch Unit
MTN6215-0410

Technical Product Presentation



Life Is On



Agenda

SpaceLogic KNX 4" Touch Unit



1. Device overview

2. ETS - Overview

3. ETS – screen configuration concept

4. ETS – switch, blind, dimming scene

5. ETS – Tuneable white / RGBW

6. ETS – Value display

7. ETS – Loop and multiple operations

8. ETS – HVAC functions

9. ETS – Audio control

10. ETS – General settings

11. ETS – Logic functions

12. ETS – Scene module

13. Custom icons, backgrounds, screensaver

Launch wave 1 (2023):

DE, SE, NO, DK, FI, ES, PT, BE, NL, UAE, KSA, EG, TR, BR, AR, CL, BO, CO, EC, PE

Life Is On

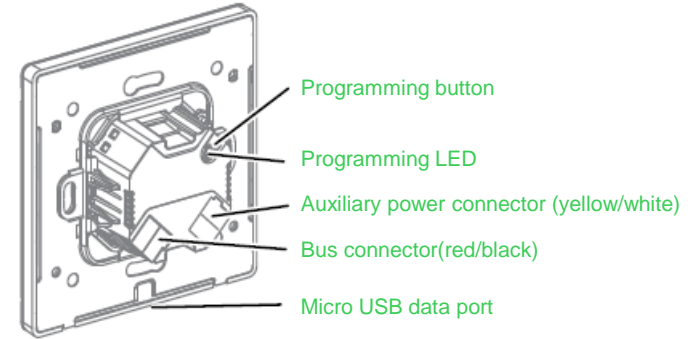
Schneider
Electric

Device Overview

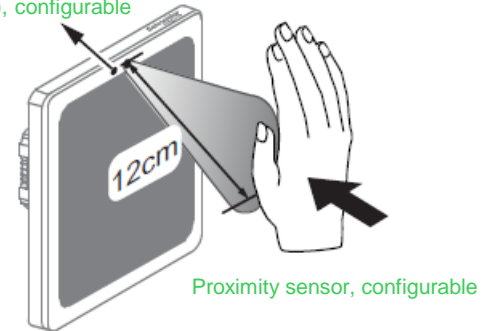
SpaceLogic KNX 4" Touch Unit

Overview Hardware

- 4 inch LCD Touch screen (10 cm)
- Resolution 480x480 pixels
- Frame-less (monoblock), black/grey, flush-mounted, 86 x 86 x 32 mm (wall height 9 mm)
- Power supply
 - KNX: DC 21-30 V, 3 mA (SELV)
 - Aux: DC 21-30 V, 85 mA (SELV)
- Proximity sensor and orientation-LED
- Temperature sensor
- Micro USB interface
 - For uploading custom icons, backgrounds and screensaver



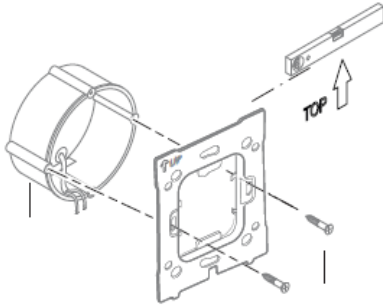
Orientation indicator
(orange/white), configurable



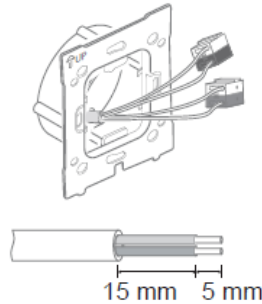
SpaceLogic KNX 4" Touch Unit

Installation

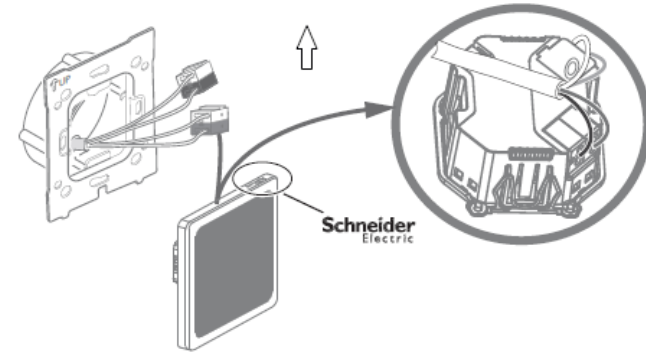
1. Flush-mounted box, >35 mm depth, 60 mm between screws, Mount the fixing frame with the arrow pointing up



2. KNX bus and aux. power can be supplied in the same bus cable (2x2x0.8 mm) Aux power via aux output of SpaceLogic KNX power supplies (or separate SELV power supply)



3. Snap-on the device on the fixing frame with the Schneider logo on the upper side



SpaceLogic KNX 4" Touch Unit

Overview Software

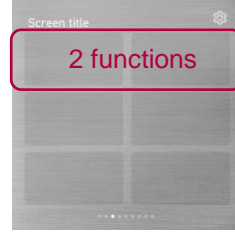
- Up to 9 screens, change by left/right swipe
- 1-6 functions per screen, depending on function
- Room temperature controller, incl. fan-coil
- Show time/date as screen saver (local or from the bus)
- Optional device access with PIN code
- Day/Night mode and orientation indicator
- Logic module
- Scene module



ETS - Screen configuration concept

Configuration of a screen

Number of function icons 1, 4 or 6)



If a field is not assigned a function, the field is not visible

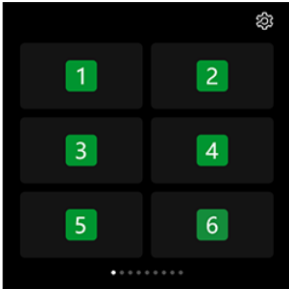


Configuration of a screen

Number of function icons 1, 4 or 6)

+ General settings	Number of function icons	1
+ Screen settings	Screen name (Up to 6 Chinese characters or 15 – 20 English characters depend on input)	
- Express settings		
- Screen 1		
Function 1		
+ Screen 2		
+ Screen 3		
+ Screen 4		
+ Screen 5		
+ Screen 6		
+ Screen 7		
+ Screen 8		
+ Screen 9		

+ General settings	Number of function icons	6
+ Screen settings		
- Express settings		
- Screen 1		
Function 1	Interface preview	
Function 3		
Function 4		
Function 5		
Function 6		
+ Screen 2	Icon 1&2 set as	<input checked="" type="radio"/> 1 function <input type="radio"/> 2 functions
+ Screen 3	Icon 3&4 set as	<input type="radio"/> 1 function <input checked="" type="radio"/> 2 functions
+ Screen 4	Icon 5&6 set as	<input type="radio"/> 1 function <input checked="" type="radio"/> 2 functions
+ Screen 5	Screen name (Up to 6 Chinese characters or 15 – 20 English characters depend on input)	

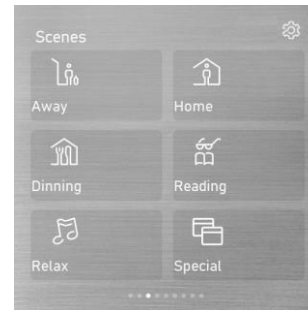
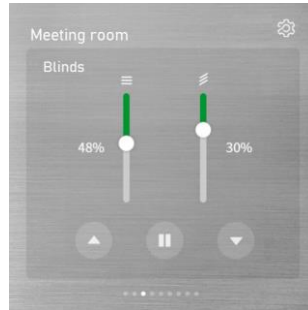
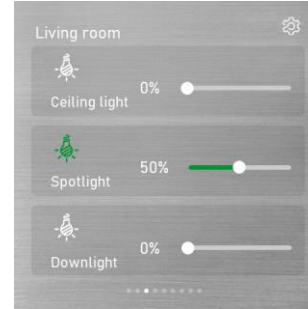


ETS – Common functions (switch, blind, dimming, scene)

Common functions

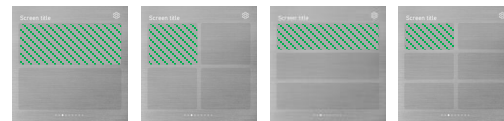
Overview

- Switch (Toggle)
- Value output
- Scene
- Brightness dimming
- Curtain/Roller shutter/Blind



Common functions

Switch



Configuration interface for a Switch function:

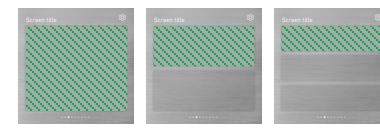
- Function: Switch
- Function name: (Up to 6 Chinese characters or 10 – 20 English characters depend on input)
- Icon preview:
- Function icon: Bulb
- Colour of function icon indication when status On: Green White
- Colour of function icon indication when status Off: Green White

- Toggle function 1 bit
- The switch object is synchronized by the Switch status object

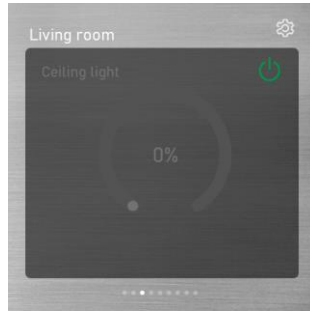
Name	Object Function	Length	Data Type	C	R	W	T	U
Screen 1 Function 1	Locking object	1 bit	enable	C	-	W	-	-
Screen 1 Function 1	Switch	1 bit	switch	C	-	-	T	-
Screen 1 Function 1	Switch, status	1 bit	switch	C	-	W	T	U

Common functions

Brightness dimming

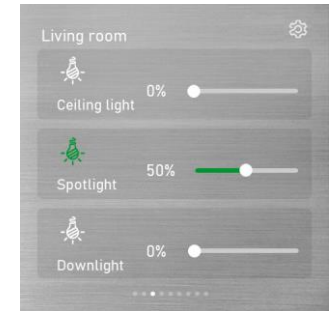
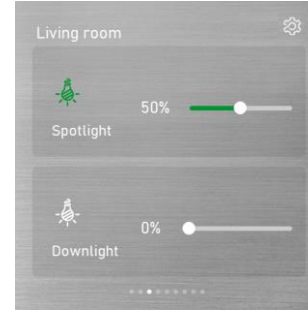


ON



OFF

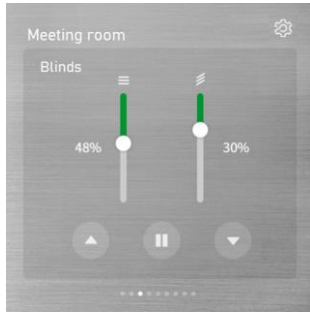
- 1 bit Toggle on/off by the “power button”
- Dim by dragging or pressing on the slider, when the light is on



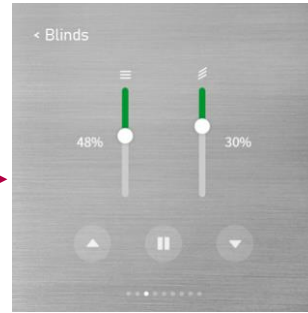
- 1 bit Toggle on/off by pressing anywhere except the slider
- Dim by dragging or pressing on the slider, also to switch on or off

Common functions

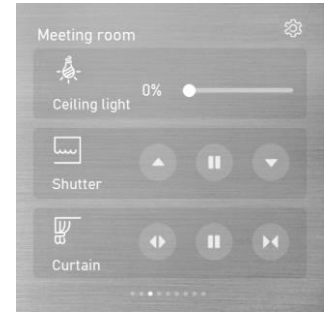
Venetian blind/ Roller Shutter/ Curtain



- Venetian blind position and slats
 - 1 bit up/down and stop/step buttons
 - Stop button is toggling 0 and 1, but thanks to a configurable “pause for change of slat direction” it is possible to step the slats in the same direction
 - Sliders for control and position status



- Venetian blind position and slats, Roller blind position, Curtain position
 - 1 bit up/down (open/close) and stop/step buttons
 - Stop button is toggling 0 and 1, but due to a configurable “pause for change of slat direction” it is possible to step the slats in the same direction
 - Icon can indicate height = 0% / height > 0%
 - Positioning on a sub page (...), incl. slats if venetian blind

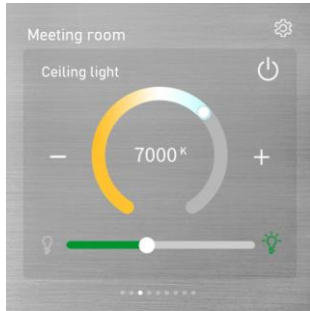


- Roller blind step/move, Curtain step/move
 - 1 bit up/down (open/close) and stop buttons
 - These functions option are also available for 1/2 screen

ETS – Tuneable White / RGB(W)

Tuneable white

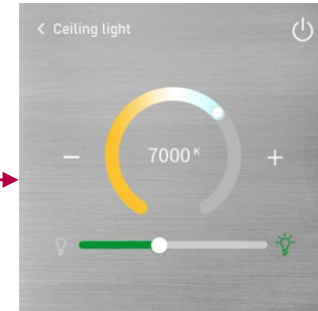
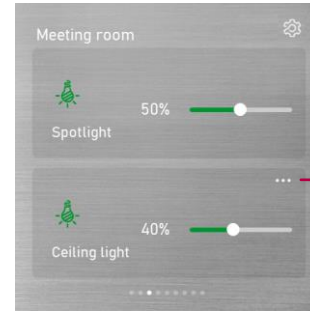
Colour temperature dimming



ON



OFF



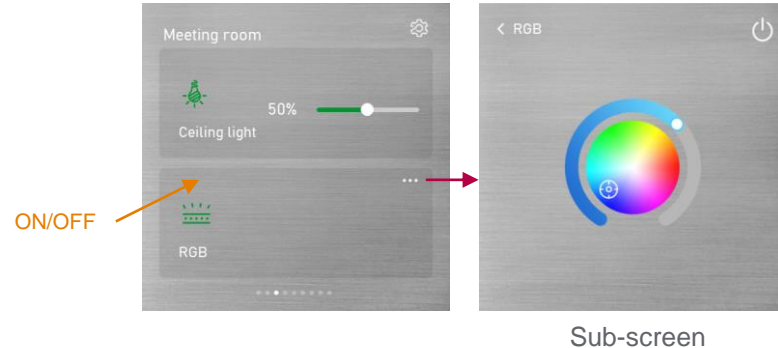
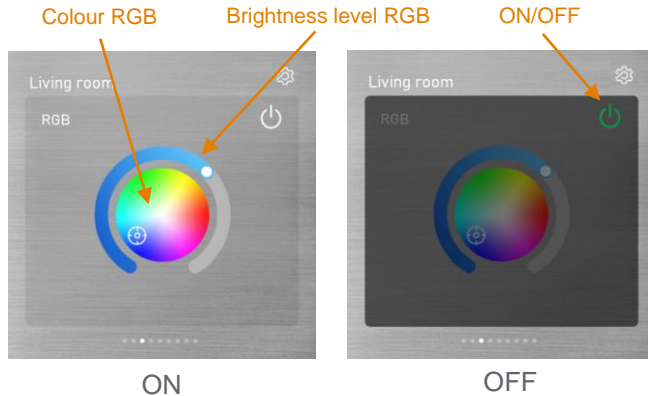
Sub-screen

- 1 bit Toggle on/off by the “power button”
- Dim by dragging or pressing on the slider, when the light is on
- Change colour temperature by dragging or pressing on the slider, or using +/- buttons, when the light is on

- Control the light as a normal dimming function from the 1/2 screen
- Same possibilities as full screen via sub-screen (...)

RGB / RGBW

RGB dimming

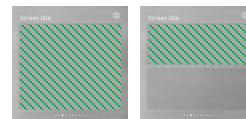


- 1 bit Toggle on/off by the “power button”
- Set colour with middle colour picker
- Adjust colour brightness with outer slider
 - Black colour (0%) to the left
 - Max colour (100%) to the right

- Control the ON/OFF from the 1/2 screen
- Same possibilities as full screen via sub-screen (...)

RGB / RGBW

RGB dimming



General settings Function: RGB dimming

Screen settings Function name:

Express settings

Screen 1

Function 1

Function 3

Function 4

Screen 2

Screen 3

Screen 4

Icon preview:

Function icon: Dimmable bulb

Colour of function icon indication when status On: Green White

Colour of function icon indication when status Off: Green White

Object datatype: 1x3byte 3x1byte

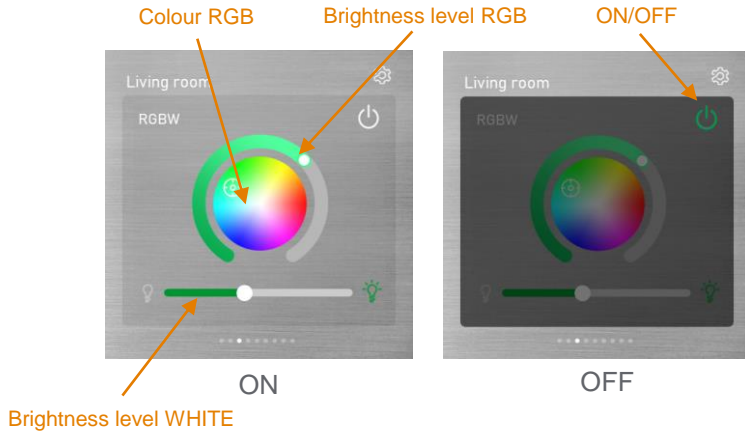
- Switching, value dimming, colour temp
 - Only the half screen has an icon
- Two alternative data types are available

Name	Object Function	Length	Data Type	C	R	W	T	U
Screen 1 Function 1	Locking object	1 bit	enable	C	-	W	-	-
Screen 1 Function 1	Switch	1 bit	switch	C	-	-	T	-
Screen 1 Function 1	RGB dimming value	3 bytes	RGB value 3x(0..255)	C	-	-	T	-
Screen 1 Function 1	Switch, status	1 bit	switch	C	-	W	T	U
Screen 1 Function 1	RGB brightness, status	3 bytes	RGB value 3x(0..255)	C	-	W	T	U

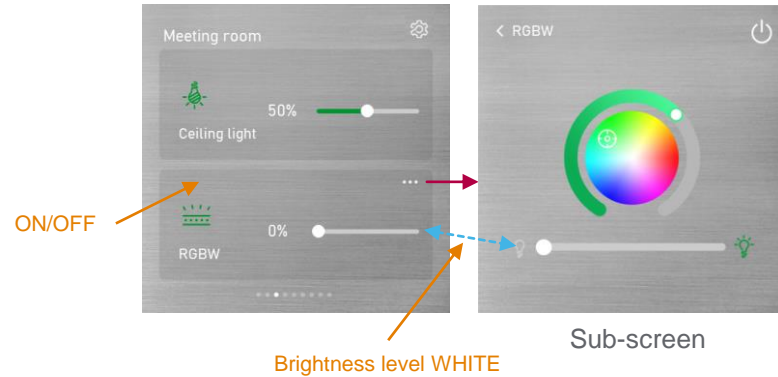
Name	Object Function	Length	Data Type	C	R	W	T	U
Screen 1 Function 1	Locking object	1 bit	enable	C	-	W	-	-
Screen 1 Function 1	Switch	1 bit	switch	C	-	-	T	-
Screen 1 Function 1	Red dimming value	1 byte	percentage (0..100%)	C	-	-	T	-
Screen 1 Function 1	Green dimming value	1 byte	percentage (0..100%)	C	-	-	T	-
Screen 1 Function 1	Blue dimming value	1 byte	percentage (0..100%)	C	-	-	T	-
Screen 1 Function 1	Switch, status	1 bit	switch	C	-	W	T	U
Screen 1 Function 1	Red brightness, status	1 byte	percentage (0..100%)	C	-	W	T	U
Screen 1 Function 1	Green brightness, status	1 byte	percentage (0..100%)	C	-	W	T	U
Screen 1 Function 1	Blue brightness, status	1 byte	percentage (0..100%)	C	-	W	T	U

RGB / RGBW

RGBW dimming



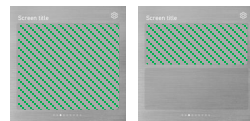
- 1 bit Toggle on/off by the “power button”
- Set colour with middle colour picker
- Adjust RGB brightness with outer slider
 - Black colour (0%) to the left
 - Max colour (100% to the right)
- Adjust WHITE brightness with lower slider



- Control ON/OFF and WHITE brightness from the 1/2 screen
- Same possibilities as full screen via sub-screen (...)

RGB / RGBW

RGBW dimming



General settings Function: RGBW dimming

Screen settings Function name:

Express settings

Screen 1

Function 1 Icon preview:

Function 3 Function icon: Dimmable bulb

Function 4 Colour of function icon indication when status On: Green White

Screen 2 Colour of function icon indication when status Off: Green White

Screen 3

Screen 4 Object datatype: 1x6byte 4x1byte

- Switching, RGB colour, White colour

- Icon indicate switch status
- Full screen doesn't have an icon

- Datatypes

- 1x6byte: only one telegram to set colour sL/W4K support the format with colour picker
- 4x1byte: 1 byte per colour, up to 4 telegrams to set a colour. To use if receiver doesn't support 1x6byte.

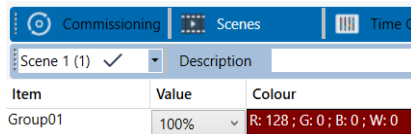
Name	Object Function	Length	Data Type	C	R	W	T	U
Screen 1 Function 1	Locking object	1 bit	enable	C	-	W	-	-
Screen 1 Function 1	Switch	1 bit	switch	C	-	-	T	-
Screen 1 Function 1	RGBW dimming value	6 bytes	RGBW value 4x(0..100%)	C	-	-	T	-
Screen 1 Function 1	Switch, status	1 bit	switch	C	-	W	T	U
Screen 1 Function 1	RGBW brightness, status	6 bytes	RGBW value 4x(0..100%)	C	-	W	T	U

Name	Object Function	Length	Data Type	C	R	W	T	U
Screen 1 Function 1	Locking object	1 bit	enable	C	-	W	-	-
Screen 1 Function 1	Switch	1 bit	switch	C	-	-	T	-
Screen 1 Function 1	Red dimming value	1 byte	percentage (0..100%)	C	-	-	T	-
Screen 1 Function 1	Green dimming value	1 byte	percentage (0..100%)	C	-	-	T	-
Screen 1 Function 1	Blue dimming value	1 byte	percentage (0..100%)	C	-	-	T	-
Screen 1 Function 1	White dimming value	1 byte	percentage (0..100%)	C	-	-	T	-
Screen 1 Function 1	Switch, status	1 bit	switch	C	-	W	T	U
Screen 1 Function 1	Red brightness, status	1 byte	percentage (0..100%)	C	-	W	T	U
Screen 1 Function 1	Green brightness, status	1 byte	percentage (0..100%)	C	-	W	T	U
Screen 1 Function 1	Blue brightness, status	1 byte	percentage (0..100%)	C	-	W	T	U
Screen 1 Function 1	White brightness, status	1 byte	percentage (0..100%)	C	-	W	T	U

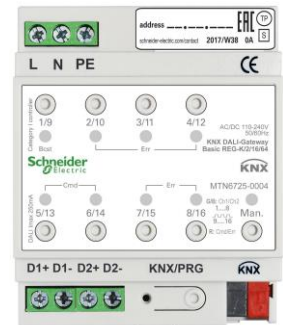
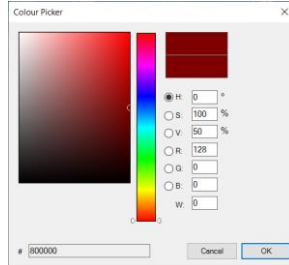
RGB / RGBW

Use with DALI-gateways and DT-8

- The RGB / RGBW function is designed for a KNX LED controller
 - The colour and brightness is controlled by the same property
 - If all LEDs are OFF, the status of the lamp is OFF, if any LED is ON, the lamp is ON
- In DALI, brightness/on-off state is separated from colour as “master”
 - Changing colour will not change the logical brightness and on/off-state
 - When setting colour black (=all LEDs off) the logical state can still be ON
- Recommended settings in DALI-gateways
 - Switch-ON (1 bit) brightness value = 100% (because this value cannot be changed from Touch 4 with function RGB/W dimming)
 - Do not control the DALI lamp by relative (4 bit) or absolute dimming (1 byte), from other sensors
 - Internal scene module:
 - Brightness level: 100%
 - Colour: select a colour that is representing the desired brightness value and colour
For example, if 50% red in wanted, choose red 50%



Item	Value	Colour
Group01	100%	R: 128 ; G: 0 ; B: 0 ; W: 0



ETS – Value display

Value display functions

Overview

- Air quality display
 - Internal or External temperature
 - Humidity
 - PM2.5
 - PM10
 - VOC
 - CO2
 - Brightness (Lux)
- Weather information
 - Wind speed
 - Rainy/Sunny (1 bit)
- Energy monitoring
 - kWh



Room temperature control panel & Internal temp measurement

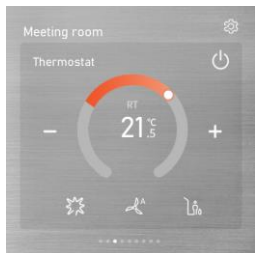
Room temperature control panel

3 usages

Advanced function	Function	Room temperature control panel
+ Screen settings	Function name (Up to 6 Chinese characters or 10 – 20 English characters depend on input)	
- Express settings	Controller from	Local (FCU controller)
- Screen 1		Local (FCU controller) ✓
Function 1		Local (Floor heating controller)
+ Screen 2		External

Please activate internal FCU controller in

Advanced function	HVAC controller	<input checked="" type="checkbox"/>
+ Screen settings	Logic function	<input type="checkbox"/>
	Scene group function	<input type="checkbox"/>
+ Express settings	FCU controller	<input checked="" type="checkbox"/>
- HVAC controller	Floor heating controller	<input type="checkbox"/>
	Ventilation controller	<input type="checkbox"/>
Controller settings		



Internal FCU controller

- Heating and/or Cooling
- Setpoint change
- Operating modes (optional)
- Fan operation (optional)



Internal Floor heating controller

- Heating
- Setpoint change



External controller

- Heating and/or Cooling
- Setpoint change
- Operating modes (optional)
- Fan operation (optional)



Room temperature control panel

With External controller

- Heating and/or cooling



Touch 4

- Temperature measurement
- Setpoint change
- Operating mode (optional)
- Heating/Cooling change-over (optional)

Each screen can control 2 external controllers, i.e. 18 in total. Local temp measurement still required



Controller outputs



Controller



VDC

Actuator

0 – 100 %

Controller outputs



- Temperature measurement
- Setpoint change



PB dynamic labeling

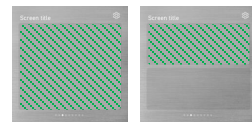


PB Pro T

- Temperature measurement

Air conditioner control panel

ON state



Slider is orange in heating mode

*RT = Room temperature
Setpoint shown for some seconds when changed.
Alternatively always setpoint.*

On/Off button

Setpoint change

*Control mode:
Auto, Heating, Cooling,
Fan, Dehumidification
(depending on config)*

*Fan speed:
Auto 1, 2, 3*

*Swing
enable/disable*

On/Off

Indication of control mode

*RT = Room temperature
Setpoint shown for some seconds when changed.
Alternatively always setpoint.*

Setpoint change

Audio Control

Audio control panel

Overview

- On/Off
- Play/Pause
- Next previous track
- Volume
- Mute
- Repeat
- Random
- Track name (14 characters)

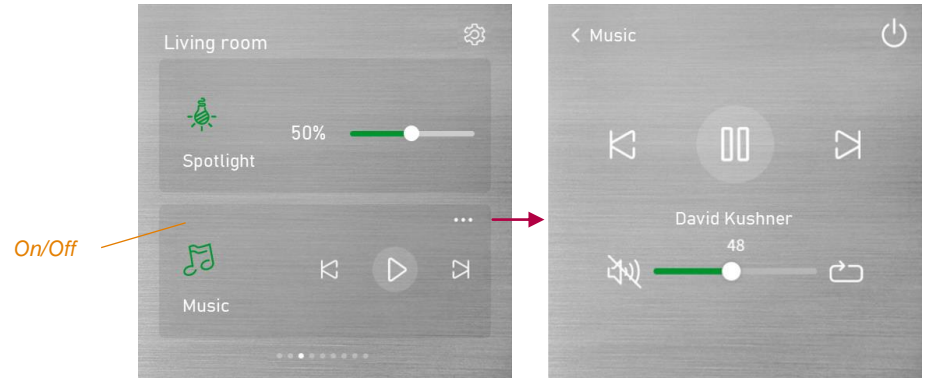
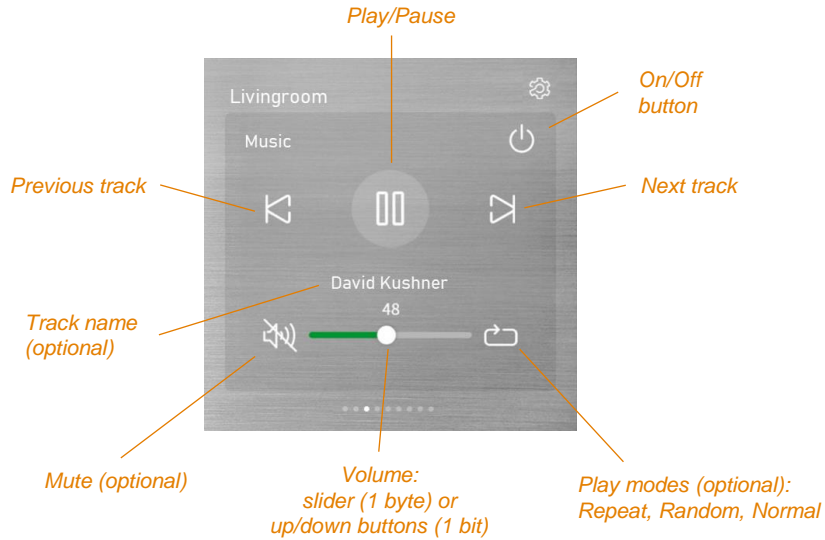
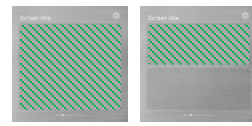
NOTE:

Nogle funktioner kræver script, da datapunkter er forskellige



Audio control panel

ON state

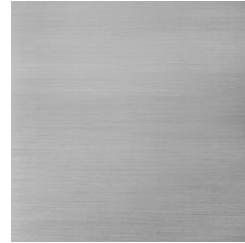


Custom icons, backgrounds and screensaver

Custom icons, backgrounds and screensaver

Overview

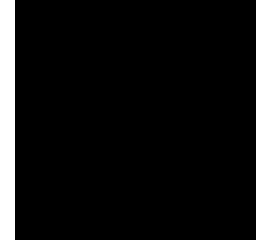
- Background pictures
 - 3 backgrounds (Themes) which is selected in ETS or in the settings menu directly on the device
 - Default: 1 (silver), 2 (blue) and 3 (black)
 - They can be replaced individually
 - NOTE: by replacing, the original is lost (no. 3 is easy to put back)
- Screensaver
 - One screensaver picture which can be replaced
 - NOTE: by replacing, the original is lost
- Custom icons with two states
 - 30 custom icons can be added each icon in two states, i.e. 60 pictures
 - Dedicated storage space, they are not replacing original icons



1.png (brushed metal)



2.png (sky with stars)



3.png (solid black)



00.png



01_W.png
(W = White, OFF icon)



01_G.png
(G = Green, ON-icon)

Custom icons, backgrounds and screensaver

Transfer files

- Plug-in the USB-stick using an OTG micro-USB to USB A adapter (not necessary to dismount the device)
- After plug-in, the device show this message; confirm or cancel

External storage device doc detected, confirm import?

storage

Path:\background

Album path:\screensaver

Icon path:\icon

- The device asks for a PIN code which is entered in ETS
- The device will then analyze the folders, file names and file size. If not correct an error message is shown.
- If correct, the device will ask to confirm or cancel each of the detected folders.
- The import is fast and easy

Standard USB-stick, FAT32,
size <= 32 Gbit



OTG micro-USB to USB A adapter

SpaceLogic KNX 4" Touch Unit

Summary

- Up to 9 screens, change by left/right swipe
- 1-6 functions per screen, depending on function
- Room temperature controller, incl. fan-coil
- Show time/date as screen saver (local or from the bus)
- Optional device access with PIN code
- Day/Night mode and orientation indicator
- Logic module
- Scene module

